IN THE SPECIFICATION:

Page 2, line 21 to page 3, line 15, amend the paragraph as follows:

The playback device performs an inverse discrete cosine transform (IDCT) on each 8x8 array of coefficients to reconstruct the equivalent to the 8x8 array of pixels from the original frame. To recover maximum detail and accuracy, all 64 of the coefficients should be processed. (Even if all 64 coefficients are used, there will still be some ~~less~~ loss of detail because of the aforementioned quantizing.) For many applications, such as consumer entertainment, a user may be willing to sacrifice some picture quality in order to have a lower-cost playback device. In a prior-art solution, a usable or acceptable level of picture quality is attained using fewer than all 64 of the coefficients, thus permitting the use of a computational element of lesser capability. The number of coefficients used in the inverse DCT is predetermined according to a desired level of quality for a particular computational element. The picture quality can be quite good for homogeneous scenes with little camera movement and little subject movement, but degrades for highly variegated scenes or when there is rapid camera movement or rapid subject movement. Picture degradation may exceed the limits of "graceful" degradation, a term of art indicating that although degradation is permitted, it is managed so as to be as unobtrusive as possible. There is thus a need for an MPEG2 playback system with ability to process fewer than all of the DCT coefficients while maintaining graceful degradation of picture quality.

Page 7, amend the paragraph beginning at line 12 as follows:

Fig. 2A, by virtue of being completely hatched, denotes that every position of the 8x8 array of DCT coefficients is used in the IDCT decoding. This is 100% of the computation complexity for reconstructing a MB. Figs. 2B through 2H each show a typical subset of the coefficients 00-63 being used in the IDCT decoding. A hatched square denotes that the corresponding DCT coefficient from the corresponding position identified in Fig. 1 is used in the IDCT decoding. An unhatched square indicates that the corresponding DCT coefficient is set to zero, and is not used. With each of Figs. 2B through 2H is a relative (i.e., percentage) indication of the resulting computation complexity. The degree to which image quality is degraded by using a subset of the DCT coefficients depends on the frequency complexity of the MBs. An MB that is a portion of a constant flat background, for example, would probably not show perceptible degradation even with the 38% complexity of Fig. ~~12H~~ 2H. On the other hand, an MB that is a portion of the checked shirt of a man sprinting across the scene from

left to right while the camera is panning the scene right to left would appear quite badly degraded with the 38% complexity of Fig. ~~12H~~ 2H, and would be degraded less with each higher level of complexity.

Page 9, amend the paragraph beginning at line 17 as follows:

For MBs having low horizontal complexity (from a uniform background, for example) the magnitude of coefficient 56 is very low, and the low-complexity encoding of Fig. ~~12H~~ 2H could accordingly used to decode the MB without introducing significant degradation. Higher levels of complexity of encoding are used for higher values of coefficient 56, thus keeping degradation down to acceptable values. For MBs for which coefficient 56 exceeds a predetermined threshold value, the 100% complexity of Fig. ~~12A~~ 2A, in which all 64 DCT coefficients are used, could be employed. For virtually all typical frames, the average computational complexity is well below 100%, even if 100% complexity decoding is used for some of the MBs comprising the frame.

Page 10, amend the paragraph beginning at line 13, as follows:

In block 306, according to a predetermined association of the maskings for subsets of DCT coefficients (Fig. 2) with the value of coefficient 56, a predetermined one of the maskings is selected. In block 308 the selected subset of DCT coefficients is used in an inverse-DCT operation to recover an approximation of the original macroblock. With the dynamic selection of coefficient subsets according to the value of coefficient 56, lower complexity is used when there is not much horizontal motion, and higher complexity is used to minimize degradation for various greater amounts of horizontal motion. A present embodiment employs one of two subset selections: the 55% complexity subset of Fig. ~~12C~~ 2C for values of coefficient 56 below a predetermined threshold, and the 86% complexity subset of Fig. ~~12G~~ 2G for values at or above the predetermined threshold.